



**FIG. 3**

The diagram illustrates a multi-stage electronic circuit, labeled 12, which is divided into two main functional sections: 36 and 38. Section 36, located in the upper right, contains a bridge rectifier 74 and a differential amplifier 40. The rectifier 74 is connected to a common input line 24 and a feedback path 78 that leads to a block labeled "[TO CIRCUIT 16]". The differential amplifier 40 has its non-inverting input (+) connected to ground via resistor 52, its inverting input (-) connected to the common input line 24 via resistor 48, and its output 56 connected to the feedback path 78. A diode 64 and capacitor 60 are connected between the output 56 and ground. Section 38, located in the lower left, contains a bridge rectifier 106 and a differential amplifier 44. The rectifier 106 is connected to a common input line 18 and a feedback path 110 that leads to a block labeled "[TO CIRCUIT 16]". The differential amplifier 44 has its non-inverting input (+) connected to ground via resistor 88, its inverting input (-) connected to the common input line 18 via resistor 46, and its output 86 connected to the feedback path 110. A diode 94 and capacitor 90 are connected between the output 86 and ground. Various resistors (70, 68, 66, 72, 50, 54, 58, 96, 98, 100, 102, 104, 80, 82) and capacitors (60, 90) are used throughout the circuit for signal conditioning and feedback.